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i
Terms: **patno=5870527** ([Edit Search](#))

Pat. No. 5870527, *

5,870,527

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Feb. 9, 1999

Robot control methods and apparatus

REISSUE: Reissue Application filed Feb. 5, 2001 (O.G. May 22, 2001) Ex. Gp.: 2762; Re. S.N. 09/775,548

INVENTOR: Fujikawa, Takayuki, Kanagawa, Japan
Fujita, Masahiro, Saitama, Japan

ASSIGNEE-AT-ISSUE: Sony Corporation, Japan (03)

APPL-NO: 730,934

FILED: Oct. 16, 1996

INT-CL: [6] G05B 11#32; G05B 19#42

US-CL: 395#80; 395#93; 395#85; 395#670; 395#672; 395#673; 395#674

PRIM-EXMR: Hafiz, Tario R.

ASST-EXMR: Patel, Jagdish

CORE TERMS: operational, arc, robot, path, transition, weighting, coefficient, starting, target, equation...

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Date/Time: Tuesday, March 5, 2002 - 8:20 AM EST

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Patent Cases
From Federal Courts
& Admin. Materials

1/1 PLUSPAT - (C) QUESTEL-ORBIT- image
 CPIM (C) Questel-Orbit
 PN - US5870527 A 19990209 [US5870527]
 TI - (A) Robot control methods and apparatus
 PA - (A) SONY CORP (JP)
 IN - (A) FUJIKAWA TAKAYUKI (JP); FUJITA MASAHIRO (JP)
 AP - US73093496 19961016 [1996US-0730934]
 PR - JP26842295 19951017 [1995JP-0268422]
 IC - (A) G05B-011/32 G05B-019/42
 EC - B25J-009/16L1
 - B25J-009/16P
 PCL - ORIGINAL (O) : 700245000; CROSS-REFERENCE (X) : 700258000 709100000
 709102000 709103000 709104000
 DT - Basic
 CT - US5008834; US5250886; US5303384; US5325468; US5430643; US5513299;
 US5519814; US5545960; US5550953; US5608843
 - Kiyoshi, et al., "Trajectory Planning Using Optimum Solution of
 Variational Problem", 1993 Power Conference IEEE, p. 666-671.

Sungtaeg Jun, et al., "A Probabilistic Approach to Collision-free
 robot path Planning", Robotics and Automation 11988 IEEE Int'l
 Conference, p.220-225.

Hiroshi Ueno, et al. "On Control and Planning of a Space Station Robot
 Walker", Systems Engineering, 1990 IEEE Int'l Conference, p. 220-223.
 STG - (A) United States patent
 AB - A robot control method for controlling the operation of a robot so as
 to pass through a plurality of states corresponding to a predetermined
 operation, comprising determining at least one operational arc between
 two directly passable states among the plurality of states showing the
 operation of the robot when passing between the two states, giving to
 each of the determined operational arcs a weighting coefficient
 corresponding to the probability of that operational arc being
 selected, selecting on a probable basis one of the operational arcs
 between the two states when making the operation of the robot pass
 between the two states based on the weighting coefficients of the
 operational arcs between the two states, and controlling the robot so
 as to perform the operation shown by the selected operational arc when
 making the operation of the robot pass between the two states.

1/1 LGST - (C) LEGSTAT
 PN - US 5870527 [US5870527]
 AP - US 730934/96 19961016 [1996US-0730934]
 DT - US-P
 ACT - 19961016 US/AE-A
 APPLICATION DATA (PATENT)
 {US 730934/96 19961016 [1996US-0730934]}
 - 19970227 US/AS02
 ASSIGNMENT OF ASSIGNOR'S INTEREST
 SONY CORPORATION 7-35 KITASHINAGAWA 6-CHOME, SHINAGAWA-KU TOKYO, JAPAN
 * FUJIKAWA, TAKAYUKI : 19970128; FUJITA, MASAHIRO : 19970203
 - 19990209 US/A
 PATENT
 - 20010522 US/RF
 REISSUE APPLICATION FILED
 20010205
 UP - 2001-22

1/1 CRXX - (C) CLAIMS/RRX
PN - 5,870,527 A 19990209 [US5870527]
PA - Sony Corp JP
ACT - 20010205 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20010522
REISSUE REQUEST NUMBER: 09/775548
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2762

Reissue Patent Number:

1/1 PAST - (C) PAST
AN - 200121-003181
PN - 5870527 A [US5870527]
OG - 2001-05-22
ACT - REISSUE APPLICATION FILED

1/2 INPADOC - (C) INPADOC

PN - JP 9114514 A2 19970502 [JP09114514]
TI - METHOD AND DEVICE FOR ROBOT CONTROL
IN - FUJIKAWA TAKAYUKI; FUJITA MASAHIRO
PA - SONY CORP
AP - JP 268422/95-A 19951017 [1995JP-0268422]
PR - JP 268422/95-A 19951017 [1995JP-0268422]
IC - G05B-019/4155; B25J-013/00; G05B-013/02

2/2 INPADOC - (C) INPADOC

PN - US 5870527 A 19990209 [US5870527]
TI - ROBOT CONTROL METHODS AND APPARATUS
IN - FUJIKAWA TAKAYUKI [JP]; FUJITA MASAHIRO [JP]
PA - SONY CORP [JP]
AP - US 730934/96-A 19961016 [1996US-0730934]
PR - JP 268422/95-A 19951017 [1995JP-0268422]
IC - G05B-011/32; G05B-019/42

1/1 LEGALI - (C) LEGSTAT

PN - US 5870527 [US5870527]
AP - US 730934/96 19961016 [1996US-0730934]
DT - US-P
ACTE- 19961016 US/AE-A
APPLICATION DATA (PATENT)
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PATENT
- 20010522 US/RF
REISSUE APPLICATION FILED
20010205
UP - 2001-22